



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,315	04/01/2004	Michael A. Centanni	ST8803US.CIP	7251

22203 7590 09/20/2004
KUSNER & JAFFE
HIGHLAND PLACE SUITE 310
6151 WILSON MILLS ROAD
HIGHLAND HEIGHTS, OH 44143

EXAMINER

LEUNG, PHILIP H

ART UNIT PAPER NUMBER

3742

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,315

Applicant(s)

CENTANNI, MICHAEL A.

Examiner

Philip H Leung

Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 2-7 and 15-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4-1-2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election without traverse of Figures 10-14, claims 1 and 8-14 in the reply filed on 8-25-2004 is acknowledged.

2. Claims 2-7 and 15-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8-25-2004.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The title should reflect the use of "induction heating".

4. The drawings filed 4-01-2004 are acceptable.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3742

6. Claims 1 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi et al (US 6,008,482) (cited by the applicant).

Takahashi shows a sterilizing vaporizer, comprising: a source of electromagnetic radiation (17, 59), and a heating apparatus for producing heat to vaporize a fluid passing therethrough, including: (a) an electrically non-conductive material (49, 30), and (b) an electromagnetically responsive material (18) (see Figures 1-14 and col. 7, line 31 – col. 14, line 36). The heating element is made of ferromagnetic metal, such as, nickel or steel (col. 7, line 54 – col. 8, line 19 and col. 14, lines 31-36). The preamble “for vaporizing a fluid to form an antimicrobial vapor” is only statement of intended use and adds little patentability weights to the claimed device and the sterilizing in Takahashi is clearly the same (see col. 1, lines 5-14 and col. 2, lines 34-39).

7. Claims 1 and 8-10 are further rejected under 35 U.S.C. 102(b) as being anticipated by Virgin (US 4,341,936).

Virgin shows a vaporizer, comprising: a source of electromagnetic radiation (18, 19), and a heating apparatus for producing heat to vaporize a fluid passing therethrough, including: (a) an electrically non-conductive material (20, 70), and (b) an electromagnetically responsive material (33) (see Figures 1 and 6 and col. 3, line 16 – col. 4, line 26 and col. 5, lines 52-64). The preamble “for vaporizing a fluid to form an antimicrobial vapor” is only statement of intended use and adds little patentability weights to the claimed device as Virgin can be used for the same purpose.

Art Unit: 3742

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being obvious over Takahashi et al (US 6,008,482) or Virgin (US 4,341,936), in view of Johnson, Jr. (US 6,023,054) or Monovoukas (US 5,378,879).

Either Takahashi or Virgin shows an induction vapor generating device having every feature and structure as claimed except for the exact material of the heating element. Johnson Jr. or Monovoukas shows that it is well known in the art of induction heating devices to use ferromagnetic material in the form of flakes, fibers or particles incorporated in a nonconductive material to form an induction heating element (see Johnson, Jr., Figures 12-14 and col. 13, line 63 – col. 15, line 45 and Monovoukas, Figures 1 and 3 and col. 4, line 57 – col. 6, line 58). It would have been obvious to an ordinary skill in the art at the time of invention to modify Takahashi or Virgin to choose any well known susceptor heating element with the use of particulate ferromagnetic material dispersed in a non-conductive material for better induction heating result, in view of the teaching of Johnson Jr. or Monovoukas. In regard to claims 11, Johnson teaches the material can also be ferrimagnetic instead of ferromagnetic (see col. 4, lines 2-7. In regard to claim 12, the use of ferroelectrics would have been a matter of engineering variations of all the materials shown in Johnson, Jr. or Monovoukas as the same is also a well known induction heatable material.

Art Unit: 3742

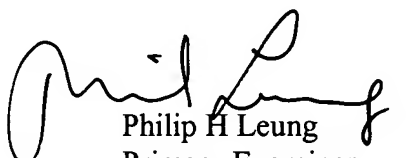
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dalton (US 6,271,509) is further cited to show the use of ferroelectric material, ferromagnetic and/or ferrimagnetic material as a susceptor material (see col. 2, line44 – col. 3, line 6 and col. 5, lines 4-21).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip H Leung whose telephone number is (703) 308-1710.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (703) 305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Philip H Leung
Primary Examiner
Art Unit 3742

P.Leung/pl
9-15-2004